

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/587,371  
Source: IFWP  
Date Processed by STIC: 08/07/2006

***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 08/07/2006

PATENT APPLICATION: US/10/587,371

TIME: 10:04:27

Input Set : F:\AMBX-002800US.ST25.txt

Output Set: N:\CRF4\08072006\J587371.raw

3 <110> APPLICANT: Cho, Ho S  
 4 Daniel, Thomas  
 5 DiMarchi, Richard  
 6 Hays, Anna-Maria  
 7 Wilson, Troy  
 8 Sim, Bee-Cheng  
 9 Litzinger, David  
 11 <120> TITLE OF INVENTION: Modified Human Four Helical Bundle Polypeptides and Their  
 Uses  
 13 <130> FILE REFERENCE: AMBX-0028.00PCT  
 C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/587,371  
 C--> 15 <141> CURRENT FILING DATE: 2006-07-26  
 15 <150> PRIOR APPLICATION NUMBER: 60/541,528  
 16 <151> PRIOR FILING DATE: 2004-02-02  
 18 <150> PRIOR APPLICATION NUMBER: 60/581,314  
 19 <151> PRIOR FILING DATE: 2004-06-18  
 21 <150> PRIOR APPLICATION NUMBER: 60/581,175  
 22 <151> PRIOR FILING DATE: 2004-06-18  
 24 <150> PRIOR APPLICATION NUMBER: 60/580,885  
 25 <151> PRIOR FILING DATE: 2004-06-18  
 27 <150> PRIOR APPLICATION NUMBER: 60/638,616  
 28 <151> PRIOR FILING DATE: 2004-12-22  
 30 <160> NUMBER OF SEQ ID NOS: 46  
 32 <170> SOFTWARE: PatentIn version 3.3  
 34 <210> SEQ ID NO: 1  
 35 <211> LENGTH: 217  
 36 <212> TYPE: PRT  
 37 <213> ORGANISM: Homo sapiens  
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 42 1 5 10 15  
 45 Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala Phe Pro Thr Ile Pro Leu  
 46 20 25 30  
 49 Ser Arg Leu Phe Asp Asn Ala Met Leu Arg Ala His Arg Leu His Gln  
 50 35 40 45  
 53 Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu Glu Ala Tyr Ile Pro Lys  
 54 50 55 60  
 57 Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro Gln Thr Ser Leu Cys Phe  
 58 65 70 75 80  
 61 Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg Glu Glu Thr Gln Gln Lys  
 62 85 90 95  
 65 Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu Leu Leu Ile Gln Ser Trp  
 66 100 105 110  
 69 Leu Glu Pro Val Gln Phe Leu Arg Ser Val Phe Ala Asn Ser Leu Val

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70          115          120          125
73 Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp Leu Leu Lys Asp Leu Glu
74          130          135          140
77 Glu Gly Ile Gln Thr Leu Met Gly Arg Leu Glu Asp Gly Ser Pro Arg
78 145          150          155          160
81 Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser Lys Phe Asp Thr Asn Ser
82          165          170          175
85 His Asn Asp Asp Ala Leu Leu Lys Asn Tyr Gly Leu Leu Tyr Cys Phe
86          180          185          190
89 Arg Lys Asp Met Asp Lys Val Glu Thr Phe Leu Arg Ile Val Gln Cys
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93 Arg Ser Val Glu Gly Ser Cys Gly Phe
94          210          215
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98 <211> LENGTH: 191
99 <212> TYPE: PRT
100 <213> ORGANISM: Homo sapiens
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108 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu
109          20          25          30
112 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro
113          35          40          45
116 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg
117          50          55          60
120 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu
121 65          70          75          80
124 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val
125          85          90          95
128 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp
129          100          105          110
132 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu
133          115          120          125
136 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser
137          130          135          140
140 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr
141 145          150          155          160
144 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe
145          165          170          175
148 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
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153 <211> LENGTH: 176
154 <212> TYPE: PRT
155 <213> ORGANISM: Homo sapiens
157 <400> SEQUENCE: 3
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163 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Asn
164          20          25          30
167 Pro Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn
168          35          40          45
171 Arg Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser
172          50          55          60
175 Leu Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser
176 65          70          75          80
179 Val Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr
180          85          90          95
183 Asp Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg
184          100         105         110
187 Leu Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr
188          115         120         125
191 Ser Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn
192          130         135         140
195 Tyr Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr
196 145         150         155         160
199 Phe Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe
200          165         170         175

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203 &lt;210&gt; SEQ ID NO: 4

204 &lt;211&gt; LENGTH: 77

205 &lt;212&gt; TYPE: DNA

206 &lt;213&gt; ORGANISM: Methanococcus jannaschii

208 &lt;400&gt; SEQUENCE: 4

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211 tccggcccgc cggacca 77

214 &lt;210&gt; SEQ ID NO: 5

215 &lt;211&gt; LENGTH: 88

216 &lt;212&gt; TYPE: DNA

217 &lt;213&gt; ORGANISM: Halobacterium sp. NRC-1

219 &lt;400&gt; SEQUENCE: 5

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222 gagggttcga atcccttccc tgggacca 88

225 &lt;210&gt; SEQ ID NO: 6

226 &lt;211&gt; LENGTH: 89

227 &lt;212&gt; TYPE: DNA

228 &lt;213&gt; ORGANISM: Halobacterium sp. NRC-1

230 &lt;400&gt; SEQUENCE: 6

231 gcgagggtag ccaagctcgg ccaacggcga cggacttcct aatccgttct cgtaggagtt 60

233 cgagggttcg aatccctccc ctgcacca 89

236 &lt;210&gt; SEQ ID NO: 7

237 &lt;211&gt; LENGTH: 306

238 &lt;212&gt; TYPE: PRT

239 &lt;213&gt; ORGANISM: Methanococcus jannaschii

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243 Met Asp Glu Phe Glu Met Ile Lys Arg Asn Thr Ser Glu Ile Ile Ser

244 1 5 10 15

247 Glu Glu Glu Leu Arg Glu Val Leu Lys Lys Asp Glu Lys Ser Ala Gly

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251 Ile Gly Phe Glu Pro Ser Gly Lys Ile His Leu Gly His Tyr Leu Gln
252          35          40          45
255 Ile Lys Lys Met Ile Asp Leu Gln Asn Ala Gly Phe Asp Ile Ile Ile
256          50          55          60
259 Leu Leu Ala Asp Leu His Ala Tyr Leu Asn Gln Lys Gly Glu Leu Asp
260 65          70          75          80
263 Glu Ile Arg Lys Ile Gly Asp Tyr Asn Lys Lys Val Phe Glu Ala Met
264          85          90          95
267 Gly Leu Lys Ala Lys Tyr Val Tyr Gly Ser Thr Phe Gln Leu Asp Lys
268          100          105          110
271 Asp Tyr Thr Leu Asn Val Tyr Arg Leu Ala Leu Lys Thr Thr Leu Lys
272          115          120          125
275 Arg Ala Arg Arg Ser Met Glu Leu Ile Ala Arg Glu Asp Glu Asn Pro
276          130          135          140
279 Lys Val Ala Glu Val Ile Tyr Pro Ile Met Gln Val Asn Thr Tyr Tyr
280 145          150          155          160
283 Tyr Leu Gly Val Asp Val Ala Val Gly Gly Met Glu Gln Arg Lys Ile
284          165          170          175
287 His Met Leu Ala Arg Glu Leu Leu Pro Lys Lys Val Val Cys Ile His
288          180          185          190
291 Asn Pro Val Leu Thr Gly Leu Asp Gly Glu Gly Lys Met Ser Ser Ser
292          195          200          205
295 Lys Gly Asn Phe Ile Ala Val Asp Asp Ser Pro Glu Glu Ile Arg Ala
296          210          215          220
299 Lys Ile Lys Lys Ala Tyr Cys Pro Ala Gly Val Val Glu Gly Asn Pro
300 225          230          235          240
303 Ile Met Glu Ile Ala Lys Tyr Phe Leu Glu Tyr Pro Leu Thr Ile Lys
304          245          250          255
307 Arg Pro Glu Lys Phe Gly Gly Asp Leu Thr Val Asn Ser Tyr Glu Glu
308          260          265          270
311 Leu Glu Ser Leu Phe Lys Asn Lys Glu Leu His Pro Met Asp Leu Lys
312          275          280          285
315 Asn Ala Val Ala Glu Glu Leu Ile Lys Ile Leu Glu Pro Ile Arg Lys
316          290          295          300
319 Arg Leu
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324 <211> LENGTH: 306
325 <212> TYPE: PRT
326 <213> ORGANISM: Methanococcus jannaschii
328 <400> SEQUENCE: 8
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334 Glu Glu Glu Leu Arg Glu Val Leu Lys Lys Asp Glu Lys Ser Ala Gly
335          20          25          30
338 Ile Gly Phe Glu Pro Ser Gly Lys Ile His Leu Gly His Tyr Leu Gln
339          35          40          45
342 Ile Lys Lys Met Ile Asp Leu Gln Asn Ala Gly Phe Asp Ile Ile Ile

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343      50      55      60
346 Leu Leu Ala Asp Leu His Ala Tyr Leu Asn Gln Lys Gly Glu Leu Asp
347 65      70      75      80
350 Glu Ile Arg Lys Ile Gly Asp Tyr Asn Lys Lys Val Phe Glu Ala Met
351      85      90      95
354 Gly Leu Lys Ala Lys Tyr Val Tyr Gly Ser Ser Phe Gln Leu Asp Lys
355      100      105      110
358 Asp Tyr Thr Leu Asn Val Tyr Arg Leu Ala Leu Lys Thr Thr Leu Lys
359      115      120      125
362 Arg Ala Arg Arg Ser Met Glu Leu Ile Ala Arg Glu Asp Glu Asn Pro
363      130      135      140
366 Lys Val Ala Glu Val Ile Tyr Pro Ile Met Gln Val Asn Thr Ser His
367 145      150      155      160
370 Tyr Leu Gly Val Asp Val Ala Val Gly Gly Met Glu Gln Arg Lys Ile
371      165      170      175
374 His Met Leu Ala Arg Glu Leu Leu Pro Lys Lys Val Val Cys Ile His
375      180      185      190
378 Asn Pro Val Leu Thr Gly Leu Asp Gly Glu Gly Lys Met Ser Ser Ser
379      195      200      205
382 Lys Gly Asn Phe Ile Ala Val Asp Asp Ser Pro Glu Glu Ile Arg Ala
383      210      215      220
386 Lys Ile Lys Lys Ala Tyr Cys Pro Ala Gly Val Val Glu Gly Asn Pro
387 225      230      235      240
390 Ile Met Glu Ile Ala Lys Tyr Phe Leu Glu Tyr Pro Leu Thr Ile Lys
391      245      250      255
394 Arg Pro Glu Lys Phe Gly Gly Asp Leu Thr Val Asn Ser Tyr Glu Glu
395      260      265      270
398 Leu Glu Ser Leu Phe Lys Asn Lys Glu Leu His Pro Met Asp Leu Lys
399      275      280      285
402 Asn Ala Val Ala Glu Glu Leu Ile Lys Ile Leu Glu Pro Ile Arg Lys
403      290      295      300
406 Arg Leu
407 305
410 <210> SEQ ID NO: 9
411 <211> LENGTH: 305
412 <212> TYPE: PRT
413 <213> ORGANISM: Methanococcus jannaschii
415 <400> SEQUENCE: 9
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421 Glu Glu Glu Leu Arg Glu Val Leu Lys Lys Asp Glu Lys Ser Ala Ala
422      20      25      30
425 Ile Gly Phe Glu Pro Ser Gly Lys Ile His Leu Gly His Tyr Leu Gln
426      35      40      45
429 Ile Lys Lys Met Ile Asp Leu Gln Asn Ala Gly Phe Asp Ile Ile Ile
430      50      55      60
433 Leu Leu Ala Asp Leu His Ala Tyr Leu Asn Gln Lys Gly Glu Leu Asp
434 65      70      75      80
437 Glu Ile Arg Lys Ile Gly Asp Tyr Asn Lys Lys Val Phe Glu Ala Met

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VERIFICATION SUMMARY

DATE: 08/07/2006

PATENT APPLICATION: US/10/587,371

TIME: 10:04:28

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L:15 M:270 C: Current Application Number differs, Replaced Current Application No

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date